

CLAIMS

1. A spray gun for fast setting plural component materials, said spray gun comprising:

a gun body;

5 an air cap;

a fluid housing removably attached to said gun housing, said fluid housing having
a threaded surface for threadedly receiving said air cap and generally
opposed first and second radial ports in said threaded surface; and
first and second seal cartridges retained in said ports by friction and said air cap.

10 2. A spray gun for fast setting plural component materials, said spray gun comprising:

a push and turn connector having first and second parts;

a gun body, said gun body having a piston slideably located therein, said piston
having said connector first part thereon;

15 a fluid housing having a mix chamber slideably located therein and extending
rearwardly from said fluid housing, said mix chamber having said
connector second part thereon;

a lock ring rotatably located on said fluid housing for threaded engagement with
said gun body so that said fluid housing and said gun body may be

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separated without the use of tools by unscrewing said lock ring and turning said connector and whereby said fluid section may be removed from said gun body without exposing said plural component materials to atmosphere.

3. The spray gun of claim 1 further comprising:

5 an air valve in said gun body;

a piston located in a passage in the interior of said gun body

a plurality of air passages connecting said air valve and said interior, each of said passages being straight and accessible by line of sight from outside said gun body.

10 4. The spray gun of claim 1 wherein said air valve engages said gun body with no more than three seals.

5. The spray gun of claim 1 wherein said air valve is connected to a muffler in said gun body..

15 6. The spray gun of claim 1 further comprising a fluid manifold removably fastened to said fluid housing, said fluid manifold being sealed thereto by an o-ring.

7. The spray gun of claim 1 further comprising a fluid manifold, said fluid manifold comprising a body and first and second fluid valves for connection to first and second components of a plural component material, each of said first and second valves comprising

20 a one piece stem having a head thereon to allow manipulation to open or closed positions; and

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a seal for sealingly engaging said manifold body.

8. The spray gun of claim 1 further comprising a mix chamber located in said fluid housing, said mix chamber having a tip and a cleanoff air passage to direct air across said tip.

5 9. The spray gun of claim 1 further comprising:

a mix chamber located in said fluid housing;

a purge air passage located in said fluid housing;

a zerk fitting in said fluid housing and connected to said purge air passage for receiving protective material.

10 10. A spray gun for fast setting plural component materials, said spray gun comprising:

a gun body;

a piston in said gun body;

a fluid housing attached to said gun body;

15 a purge rod extending from said piston through said fluid housing;

a mix module located with said purge rod passing therethrough along an axis, said mix module having first and second sets of fluid passages for connection to first and second components of a plural component material, each of said passages having inner ends adjacent said purge rods and outer ends, the inner ends of said passages being located in substantially the same plane

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normal to said axis and the outer ends of said first and second sets of passages being located in different planes normal to said axis.

11. A spray gun for fast setting plural component materials, said spray gun comprising:

- 5 a gun body;
- a piston in said gun body;
- a fluid housing attached to said gun body;
- a purge rod extending from said piston through said fluid housing;
- a mix module located in said fluid housing with said purge rod passing
- 10 therethrough along an axis,
- a retaining ring threadedly attached to said fluid housing for releasably retaining said mix module; and
- an air cap threadedly attached to said fluid housing, said air cap comprising lugs for engaging said retaining ring when said air cap is removed to allow said
- 15 retaining ring to be tightened and removed.

12. The spray gun of claim 11 further comprising:

- an air valve in said gun body;
- a piston located in a passage in the interior of said gun body

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a plurality of air passages connecting said air valve and said interior, each of said passages being straight and accessible by line of sight from outside said gun body.

13. The spray gun of claim 11 wherein said air valve engages said gun body with no more than three seals.

14. The spray gun of claim 11 wherein said air valve is connected to a muffler in said gun body..

15. The spray gun of claim 11 further comprising a fluid manifold removably fastened to said fluid housing, said fluid manifold being sealed thereto by an o-ring.

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